

REMARKS

Applicants respectfully traverse and request reconsideration.

Claim 11 was objected to. Claims 1-8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Oguma (U.S. Patent No. 6,384,868). Claims 9-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Oguma and further in view of Duffield (U.S. Patent No. 5,194,954). Claims 1-12 are believed to be patentable without amendment

Claim Objections

Claim 11 was objected to. Claim 11 has been amended to correct a typographical error made when previously amending claim 11. Claim 11 is now believed to be in condition for allowance.

Claim Rejections -35 U.S.C. §102(e)

Claims 1-8 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Oguma (U.S. Patent No. 6,384,868).

One embodiment of Oguma is directed to a video switching apparatus that includes a television receiver (FIG. 10; col. 23 lines 1-2). When the video switching apparatus switches from channel A to channel B, it halts a write enable signal thereby causing a still image of channel A to be displayed continuously on the CRT (for example, for 1 or 2 field periods) (col. 24, lines 25-27; col. 24, lines 35-38). Then after the tuner synchronization becomes stable channel B fields are written into memory in units of a predetermined number of lines (col. 24, lines 44-47). For each field a fraction of the lines of the image from channel B are written over the still image from channel A (col. 24, lines 47-50; FIG. 11(c)). This has the effect that the channel B image appears to slide over the channel A image like a curtain (col. 26, lines 16-17) and avoids an unstable image being displayed during the switch of frequencies (col. 24, lines 32-34). Since Oguma teaches of tuner synchronization needing 1 or 2 field periods to become stable after a frequency switch, Oguma does not teach of receiving fields from channel A and channel B that are adjacent in time.

Claim 1 is directed to a method of tuning a system including tuning a receiver to a first frequency, receiving a first field of video associated with the first frequency, tuning the receiver to a second frequency, and receiving a second field of video associated with the second

frequency, wherein the first field of video and the second field of video are adjacent in time. While Oguma does teach of a television receiver switching from one frequency to another, Oguma speaks of the receiver tuner requiring time to become stable such as, for example, 1 or 2 field periods (col. 24, lines 38-39). As such Oguma does not receive fields adjacent in time on two different frequencies. Hence Oguma does not teach or suggest, inter alia, receiving a first field of video associated with a first frequency and then receiving a time adjacent second field of video associated with a second frequency. For at least this reason claim 1 is allowable.

Claim 2 adds to claim 1 that the receiver is tuned to the second frequency during the vertical blanking interval. The examiner cites Oguma as inherently teaching tuning the receiver during a vertical blanking interval. However, the cited portion of Oguma (i.e. FIG. 10-11 and col. 23-25) states merely that Oguma performs switching from one frequency to another and does not specify when exactly the switching occurs. Therefore, Oguma does not teach or suggest of performing switching during a vertical blanking interval. Hence for at least this reason claim 2 is allowable.

Claim 3 adds to claim 1 the step of providing a second frequency indicator to the receiver prior to the step of tuning the receiver to a second frequency. The Examiner cites the screen termination flag outputted by the screen update termination circuit as a second frequency indicator. As shown in FIG. 11(d), the update termination flag is asserted once the switching process from the still frame of channel A to the frames of channel B is complete. As shown in FIG. 11(c) this switching process happens gradually over multiple frames. Hence the update termination flag is not asserted prior to the switching from frequency A but instead well after the frequency change has occurred. The update termination flag can therefore not be a second frequency indicator provided to the receiver prior to the step of tuning the receiver to the second frequency. For at least this reason claim 3 is allowable.

Claim 4 adds to claim 3 that the frequency indication is provided in less than approximately 1.2 milliseconds. As discussed above with regard to claim 3, the termination flag of Oguma is not a frequency indicator. However, assuming for the sake of argument that the termination flag is a frequency indicator, Oguma does not teach or suggest the termination flag happening within a particular time period. Hence Oguma can not teach or suggest of the termination flag being provided in less than approximately 1.2 milliseconds. For at least this reason claim 4 is allowable.

Claim 5 adds to the method of claim 1, inter alia, the steps of displaying the first field, tuning the receiver to the first frequency after receiving the second field, receiving a third field associated with the first frequency, and displaying the third field. The first field and the third field are adjacent frames of a common video image. Oguma does teach of switching from a first frequency to a second frequency. However, Oguma does not teach of switching back from the second frequency to the first frequency. In Oguma, after switching to the second frequency, a still image received on the first frequency is displayed (col. 25, lines 34-37). In succeeding frames the still image is gradually replaced with lines from frames received on the second frequency (FIG. 11(c)). Hence even if Oguma did suggest switching back to the first frequency (which it doesn't), many frames would have passed so Oguma could not teach of displaying a third field associated with the first frequency that is an adjacent frame of a common video with the first field associated with the first frequency. For at least these reasons claim 5 is allowable.

Claims 6 is dependent upon claim 1, which has shown to be allowable above. Moreover, claims 6 introduces additional novel subject matter that represents patentable subject matter. Accordingly, claims 6 is allowable.

Claim 7 adds to claim 1 that the receiver is tuned to the second frequency during the vertical blanking interval. The examiner cites Oguma as inherently teaching tuning the receiver during a vertical blanking interval. However, the cited portion of Oguma (i.e. FIG. 10-11 and col. 23-25) states merely that Oguma performs switching from one frequency to another and does not specify when exactly the switching occurs. Therefore, Oguma does not teach or suggest of performing switching during a vertical blanking interval. Hence for at least this reason claim 7 is allowable.

Claim 8 is directed to a method of providing video including all of the steps of claim 1 and further including tuning the receiver to the first frequency; receiving a third field associated with the first frequency; displaying an image based upon the first field at a first location; displaying a second image based upon the second field at a second location; and displaying an image based upon the third field at the first location to provide a full motion video sequence. Claim 8 is allowable for at least the same reasons as claim 1. Furthermore, as discussed above with regard to claim 5, Oguma does not teach or suggest of switching back from the second frequency to the first frequency and receiving a third field associated with the first frequency. Oguma does teach of displaying a series of images that is partially based on a frame received on

the first frequency and a series of frames received on a second frequency (FIG. 11(c)). However, all of the series of images are based on a single still image received on the first frequency (col. 25, lines 34-37; FIG. 11(c)). Since only a single frame associated with the first frequency is used, Oguma can not teach or suggest of displaying an image based upon a third field associated with the first frequency at the first location of the display device to provide a full motion video sequence. For at least these reasons, claim 8 is allowable.

Claim Rejections –35 U.S.C. §103(a)

Claims 9-12 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Oguma and further in view of Duffield (U.S. Patent No. 5,194,954).

Duffield is directed to an automatic channel sampling system for a television tuner (abstract). When the television tuner is turned on, the television switches from channel to channel and samples images while the picture tube is warming up (col. 1, lines 57-62). Once the tube is warmed up, still images of a number of channels are displayed so that the viewer can choose a program to watch (col. 1, lines 49-68). During the sampling process, the PIP unit of the television stores a full frame of video from each channel and then the next channel is sampled (col. 4, lines 53-64). The system then produces a 3X4 matrix of still images for display (col. 5, lines 5-10).

Claim 9 is directed to a method of displaying video including the steps of alternating reception of a first field set and a second field set at a common receiver, wherein the first field set is associated with the first frequency, and the second field set is associated with the second frequency; and simultaneously displaying the first field set and the second field set as full motion video. Oguma does teach of switching a television receiver from frequency A to frequency B. However, Oguma does not teach or suggest switching back from frequency B to frequency A so as to alternate reception of a first field set associated with one frequency with a second field set associated with a second frequency. Duffield also teaches of switching from one channel to another as part of a process of sampling images (col. 4, lines 58-62). But Duffield also does not teach or suggest switching back to a previously sampled channel so as to alternate reception of a first field set associated with one frequency with a second field set associated with a second frequency. Hence neither Oguma or Duffield, singly or in combination, teach or suggest of alternating reception of a first field set and a second field set at a common receiver, wherein the

first field set is associated with the first frequency, and the second field set is associated with the second frequency. For at least this reason claim 9 is allowable.

Furthermore, as the Examiner admits, Oguma does not teach the step of simultaneously displaying the first and second field set as full motion video. The Examiner relies on Duffield to teach of simultaneously displaying the first and second field sets as full motion video. However, Duffield just teaches of collecting and displaying a grid of still images sampled from the different channels (abstract; col. 5, lines 5-10; col. 1, lines 31-35, 49-65). Hence Duffield also does not teach or suggest of displaying the first and second field set as full motion video. For at least this additional reason claim 9 is allowable.

Claim 10 adds to the method of claim 9 that the step of alternating includes alternating reception of a first field set and a second field set at a common receiver in approximately 1.2 milliseconds. As discussed above with regard to claim 9, Oguma does not teach alternating between a first field set and a second field set. However, assuming for the sake of argument Oguma does teach of alternating between a first field set and a second field set, Oguma does not teach or suggest of frequency switching happening within a particular time period. Hence Oguma can not teach or suggest of alternating reception of a first field set and a second field set at a common receiver in approximately 1.2 milliseconds. Duffield teaches of collecting 12 still images on different frequencies in about 5 seconds (col. 4, lines 30-31). This implies that frequency switching is done about every 0.4 seconds. Hence Duffield also does not teach or suggest of alternating reception of a first field set and a second field set at a common receiver in approximately 1.2 milliseconds. For at least this reason claim 10 is allowable.

Claim 11 adds to the method of claim 9 that the first field set and the second field set are displayed simultaneously on a single video device as full motion video. As discussed above with regard to claim 9, neither Oguma or Duffield teach of simultaneously displaying full motion video received as field sets associated with different frequencies. For at least this reason claim 11 is allowable.

Claim 12 adds to the method of claim 9 that the step of simultaneously displaying includes simultaneously displaying the first field set and the second field set as full motion video on different display devices. As the Examiner admits neither Duffield or Oguma teach of simultaneously displaying the first field set and second field set as full motion video on different display devices. The Examiner asserts it would have been obvious to do this. Applicant's assert

that it would not have been obvious to use two different display devices to display the two different full motion video signals. This is because it is not normally possible to receive two different full motion video signals simultaneously with a single receiver. For at least this reason claim 12 is allowable.

Applicants have made certain amendments to the claims. These amendments were made only to correct minor typographical errors and grammatical informalities. Further, Applicant submit that none of these amendments introduce new matter into the specification or change the scope of the claimed subject matter.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned "Version with markings to show changes made".

Applicants respectfully request that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed agent if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS

Please substitute claim 11 below for the claim having corresponding numbers:

11. The method of claim [8]9, wherein the step of simultaneously displaying includes simultaneously displaying the first field set and the second field set as full motion video on a single display device.